# FINANCIAL MODERNIZATION AND RISK ANALYSIS (MARA) 2040 FORECAST

## Building an Economic Model to Identify Financial Risks and Pressures

As directed by HB 330, the Financial Modernization and Risk Analysis Committee (MARA) has undertaken a study of the long-term financial needs of the state and the local governments, while considering changes in demographics, technology, and the economy. The Legislative Fiscal Division, under the direction of MARA, is building a model based on econometric data from IHS Markit (and others) capable of identifying future financial risks to the state's revenues and expenditures, as well as, considering impacts on local governments' revenues and expenditures. In order to accomplish this complex task, the MARA committee relies on a **data-driven** approach to identify potential financial concerns for the state and for local governments. This approach has a **medium- to long-term time focus**, from present to 2040.

## Role of Legislative Committee Members and Others

Legislative interim committee members are invited to participated in MARA committee meetings to discuss economic and cost drivers including healthcare, education, incarceration, energy, property tax, housing, and more. In addition, MARA will consider advise from economic experts on the future of the energy economy, advancements in technology, the future of healthcare, demographics, childcare, land use, and other topics. Interested parties including agency analysts and professional economists will vet assumptions and provide feedback.

## Goals

The goal of the model is to identify areas of financial risk for the state and the local governments. When the data identifies pressure areas, members of the interim policy and budget committees and other interested parties will be asked to engage in conversations to determine if policy reforms would be beneficial. If policy reforms are needed, a further goal is to determine the evidence-based best practices that most optimally address current or forecasted policy concerns.

**In summary MARA's approach to a long-term understanding of state and local finance is the following:**

**M - Modular** – State and local policy and financial areas will be separated into modules for modeling purposes;

**I - Inclusive** – open communication with legislative committees, local, regional, stakeholders, and experts;

**D - Data-driven forecasting** – uses compiled data from the State Accounting Budget and Human Resource System (SABHRS), IHS Markit econometric data, Regional Economic Models Inc. (REMI) population data, K-12 education data, local government data, market value of property by class, Department of Revenue data, and other sources;

**I - Insightful** - Uses and considers advances in technology, modern consumer preferences, population; and

**L - Long-term outlook** – looking forward from present to 2040

## Next Steps

Legislative interim committee members will continue to be invited to join MARA meetings to hear from economic experts and actively participate in discussions. Staff will communicate progress and request feedback from interested parties and update legislative committees on the development of the model. Any stakeholder interested in working with us on the model, please contact Susie Lindsay at slindsay@mt.gov and she will follow up with the analysts involved.  Preliminary findings will be presented to legislative committees in summer 2022 and final conclusions in fall 2022.

## Questions? Contact Us

The Legislative Fiscal Division staff are available to answer your questions.  Amy Carlson, Director and Legislative Fiscal Analyst, manages the scope of the project and Lead Fiscal Analyst, Nick VanBrown builds the model with LFD data team members.  Both Amy and Nick are available to answer questions.

## EDUCATION MODULE

The 2040 MARA model will be broken into "modules". The modules reflect different aspects of the revenues and expenditures of state government, local government, and school districts. The diagram below shows the revenue components in green and the expenditure components in blue. The Montana University System (MUS) and K-12 expenditures will be developed in the education module. The funding to support MUS and K-12 will be developed in the property tax and tax and revenue modules.

**Modules**



## Data Driven

All modules will rely on a consistent set of data used to keep the model assumptions consistent through all modules. Examples are econometric data from IHS Markit, Regional Economic Models, Inc (REMI), and others. The graphic depicts the flow of data into the model, scenarios, and the modeled outputs.
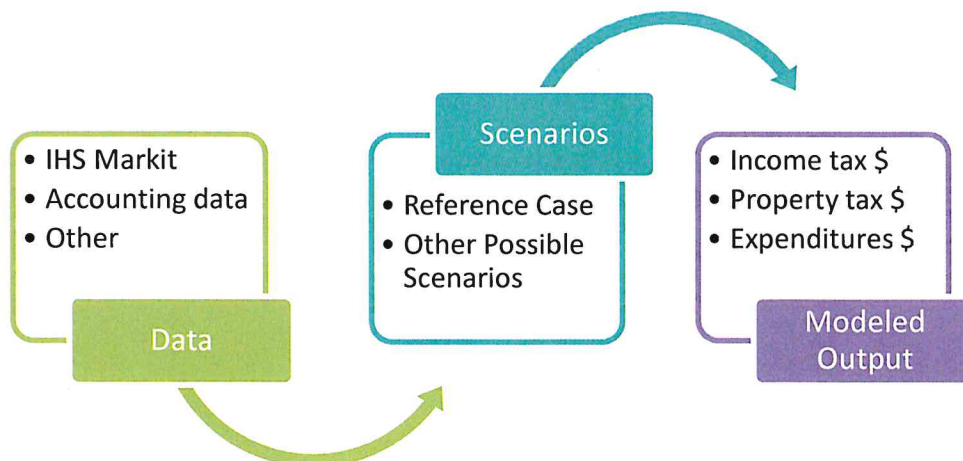
## MUS Process

The MUS process will begin with the following tasks:

- Gather these data:
    - Past 20 years of MUS revenues and expenditures by fiscal year
    - Enrollment data
    - Western Interstate Commission for Higher Education (WICHE) peer historical averages
    - Commonfund Higher Education Price Index (HEPI)
    - Actuarial pension system evaluations
- Reach out to stakeholders:  Montana University System Board of Regents, Office of the Commissioner of Higher Education, Governor's Office of Budget and Program Planning, Education Interim Committee, Education Interim Budget Committee, Community College Presidents
- Develop a small group of experts for sounding board

Analysis:  evaluate the data with ideas from stakeholders and experts, consider how to incorporate changes in technology, population, demographics, etc. into the module.

## K-12 Process

The K-12 process will begin with the following tasks:
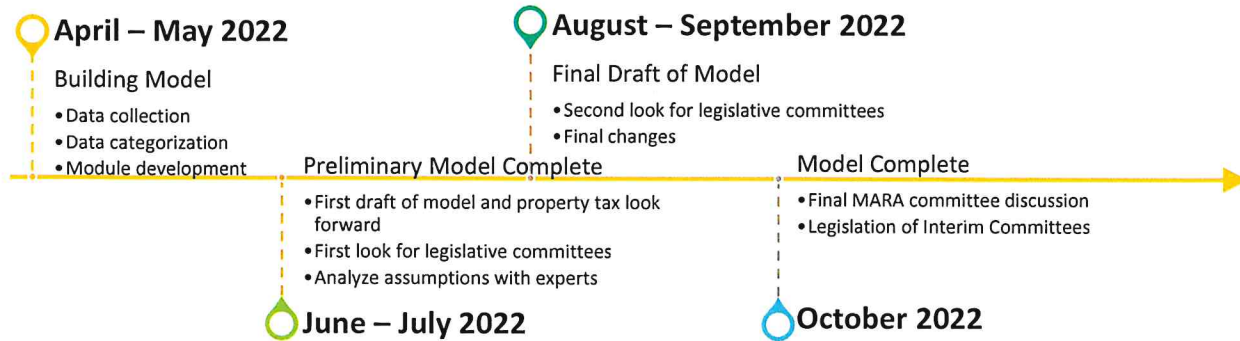
Expenditure Process

- Gather these data:
    - Past 20 years of K-12 revenues, expenditures, enrollment, budgeted ANB, and population by county
    - Poverty by county or a Title 1 statistic by district
    - American Indian statistics
    - Actuarial pension system evaluations
- Reach out to stakeholders:  School Boards Association, School Fiscal officers, Governor's Office of Budget and Program Planning, the Office of Public Instruction, Education Interim Committee, Education Interim Budget Committee
- Develop a small group of experts for sounding board

Revenue Process

The property taxes for K-12 schools will use the expenditure forecast to determine necessary property taxes. The property tax module will incorporate impacts from all taxing jurisdictions for impacts on taxpayers.

Analysis:  evaluate the data with ideas from stakeholders and experts, consider how to incorporate changes in technology, population, demographics, poverty, etc. into the module.

## Timeline for Completion

**April – May 2022**

Building Model
- Data collection
- Data categorization
- Module development

Preliminary Model Complete
- First draft of model and property tax look forward
- First look for legislative committees
- Analyze assumptions with experts

**June – July 2022**

**August – September 2022**

Final Draft of Model
- Second look for legislative committees
- Final changes

Model Complete
- Final MARA committee discussion
- Legislation of Interim Committees

**October 2022**

The first draft of the model will be available in June. Additional legislator, stakeholder, and expert feedback will be sought during the summer months for suggested improvements to the model. The final version of the model is expected in early September. If you have questions about the modules or final model, or would like to provide feedback, please contact Susie Lindsay at slindsay@mt.gov.